



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,574	07/07/2005	Kenji Inagaki	Q88973	7802
23373	7590	03/17/2008	EXAMINER	
SUGHTRUE MION, PLLC			MESH, GENNADY	
2100 PENNSYLVANIA AVENUE, N.W.				
SUITE 800			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20037			1796	
			MAIL DATE	DELIVERY MODE
			03/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,574	<b>Applicant(s)</b> INAGAKI ET AL.
	<b>Examiner</b> GENNADII MESH	<b>Art Unit</b> 1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 February 2008.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7 and 9 - 14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7 and 9 - 14 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-166/08)  
     Paper No./Mail Date 10/09/2007.
- 4) Interview Summary (PTO-413)  
     Paper No./Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

Applicant's Amendment filed on February 12,2008 is acknowledged.

Claim1 is amended, Claim 8 is canceled. Claims 1-7 and 9-14 are pending.

Rejection is maintained as it was set forth in previous Office action mailed on October 12,2007 but altered.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1- 7 and 9 -14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al.( US 6,372,343) in view of Yamamoto ( US 6,593,447) combine with Kowallik et al.( 4,254,0180).

Regarding Claim 1 Yamada discloses polyester fiber structures ( see abstract), comprising polyester fibers as nonwoven or wadding structures( see Example 1,column 7lines 65-66) or fiber structures having thickness about 50 mm ( see Example 5, lines 5-10, column 10) comprising polyester staple fiber and heat- bonding conjugated staple fibers ( lines 1-5,column 10) , which can be composite polyester based staple fiber ( see lines 58- 68,column 4).

Yamada is silent regarding specific type of catalyst chosen for polyester production.

However, Yamamoto teach, that polyester fiber( see lines 16-22,column 1) can be obtain from polyester produced by polycondensation process, wherein catalytic

Art Unit: 1796

system comprising phosphorous stabilizing compound, allowed to obtain **polyester with good color tone and excellent melt stability** compare, for example, with polyester obtained by antimony comprising catalyst ( see lines 46-61,column 1 and 50 – 57,column 2).

According Yamamoto catalytic system comprises:

- i) titanium compound - see formula (I) of abstract - this compound is substantially same as compound (IV) of Claim 1
- ii) aromatic polyfunctional carboxylic acid – see formula ( II) of abstract – this component same as component (II) of Claim 1
- iii) phosphorus compound - see Formula (III) in abstract. Note, that this phosphorus compound of Yamamoto is similar, but different from component (III) of Claim 1.

However, use of this specific phosphorus compound ( Formula (III) in Claim 1) for polyester polymerization is well known in the art.

Kowallik teach( see abstract) that phosphonate compound of chemical Formula (III) can be used as heat stabilizing agent during polyester polymerization process and capable not only suppress discoloration, but also prevent **formation of coarse precipitates that can clog spinning dyes during fiber production.**

Therefore, it would have been obvious for ordinary skill in the art at the time of the invention to obtain polyester fiber structure as it disclosed by Yamada made out of polyester fibers obtain by polymerization process with catalytic system, comprising specific phosphorous compound (of Formula ( III) as it claimed by Applicant) per teaching of Yamamoto combine with Kowallik , in order to obtain **Polyester with**

**good color tone and excellent melt stability and prevent formation of coarse precipitates that can clog spinning dyes during fiber production.**

Regarding limitations of Claim 2 and 3 - see Yamamoto, lines 50 – 53,column 6 and lines 29-39,column 5.

Regarding limitation of Claim 4 – see Yamamoto , abstract.

Regarding limitations of Claims 5 and 6 – see Yamamoto, lines 60-68,column 8 and 1-5,column 9.

Regarding limitation of Claim 7- see Yamamoto, lines 31-48,column 10.

Regarding limitation of Claims 11-12 – see Yamada lines 61-68,column 5 and lines 1-15,column 6.

Regarding limitation of Claims 9 and 10 – see Yamada, lines 46-49,column 3.

Regarding limitation of Claims 13 and 14- see Yamada, abstract and Example 5, lines 1-11, column 10.

2. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al.( US 6,372,343) in view of Yamamoto ( US 6,593,447) combine with Kowallik et al.( 4,254,0180) as applied to claims 1- 7 and 9 -14 above, and further in view of Bair ( US 5,096,722).

As it was discussed above, Yamada in view of Yamamoto combine with Kowallik discloses polyester fiber structures obtain by polymerization with specific catalytic system, but silent regarding use of this material for application involving contact with food.

However, use of polyester fiber structures for application involving contact with food is known.

For example, Bair( US 5,096,722) teach that pad with polyester staple-fiber core layer provides **efficient absorption and retention of liquid fat and grease generated during microwave cooking.**

Therefore, it would have been obvious for ordinary skill in the art at the time of the invention to use polyester based fiber structure disclosed by Yamamoto in view of Yamada combine with Kowallik for process involving contact with food as it taught by Bair.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

Art Unit: 1796

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3.1. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 7,087,299 to Konishi et al. in view of Yamada et al.( US 6,372,343).

Although the conflicting claims are not identical, they are not patentably distinct from each other, because they represent obvious variation of each other: Konishi discloses process for producing polyester fibers ( see claims 1- 6 ) by same catalytic system including same Titanium compound and same Phosphorous compound ( see claim 1), but silent regarding use of polyester fibers for specific utility as nonwoven fabric or wadding structures.

However, as it discussed in rejection above – see paragraph 1 – Yamada teach that nonwoven fabric or wadding structures can be obtain from polyester fibers.

Therefore, it would be obvious to one of ordinary skill in the art use polyester fibers produced by process disclosed by Konishi in order to obtain nonwoven fabric or wadding structures per teaching of Yamada.

3.2. Claims 1-7 directed to an invention not patentably distinct from claims 1-6 of commonly assigned U.S. Patent No. 7,087,299 as it shown above.

3.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned U.S. Patent No. 7,087,299, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

4.1. Claims 1- 6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 and 20-21 of U.S. Patent No. 7,189,797 in view of Yamada et al.( US 6,372,343) combine with Yamamoto (US 6,593,447) and Kowallik et al.( 4,254,0180).

Although the conflicting claims are not identical, they are not patentably distinct from each other, because they represent obvious variation of each other.

Claims 1-8 and 20-21 of U.S. Patent No. 7,189,797 drawn to process of producing polyester with identical catalyst as it claimed by the Applicant in Claims 1-6.

Claims 1-8 and 20-21 of U.S. Patent No. 7,189,797 are silent regarding use of the polyester for fibers structures.

However, as it was discussed above Yamada et al.( US 6,372,343) in further view of Yamamoto ( US 6,593,447) combine with Kowallik et al.( 4,254,0180) teach that this specific polyester can be used for production of fiber and fiber based structures.( see paragraph 1 above).

Therefore, it would have been obvious for ordinary skill in the art at the time of the invention to modify claims of U.S. Patent No. 7,189,797 and claimed use of polyester obtained by specific catalyst for fiber and fiber based structures as it was taught by Yamada in view of Yamamoto combine with Kowallik.

4.2. Claims 1-7 directed to an invention not patentably distinct from claims 1-6 of commonly assigned U.S. Patent No. 7,189,797 as it shown above.

Art Unit: 1796

4.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned U.S. Patent No. 7,189,797 discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

5.1. Claims 1- 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/542,373: claims of both Applications significantly overlapping in scope as claimed subject matter drawn to polyester fibers, obtain by the same polymerization process with same catalytic system in both Applications.

This is a provisional obviousness-type double patenting rejection.

5.2. Claims 1-6 directed to an invention not patentably distinct from claims 1-20 of commonly assigned Application No. 10/542,373.

5.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned Application No. 10/542,373 discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

6.1. Claims 1- 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1- 15 of copending Application No. 10/535,419: claims of both Applications significantly overlapping in scope as claimed subject matter drawn to polyester fibers, obtain by the same polymerization process with same catalytic system in both Applications.

This is a provisional obviousness-type double patenting rejection.

6.2. Claims 1-6 directed to an invention not patentably distinct from claims 1-15 of commonly assigned Application No. 10/535,419.

6.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned Application No. 10/535,419 discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

7.1. Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1- 16 of copending Application No. 10/540,880 : claims of both Applications significantly overlapping in scope as claimed subject matter drawn to polyester fibers, obtain by the same polymerization process with same catalytic system in both Applications.

This is a provisional obviousness-type double patenting rejection.

7.2. Claims 1-6 directed to an invention not patentably distinct from claims 1-16 of commonly assigned Application No. 10/540,880.

7.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned Application No. 10/540,880 discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

#### ***Response to Arguments***

8.1 Applicant's arguments with respect to claims 1-7 and 9 – 14 and ODP rejections (see paragraph 3.1 – 4.3) have been considered but are moot in view of the new ground(s) of rejection.

8.2. Provisional ODP rejections ( see paragraph 5.1 – 7.3 ) are maintained for the Record.

***Conclusion***

**THIS ACTION IS NOT MADE FINAL**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gennadiy Mesh whose telephone number is (571) 272 2901. The examiner can normally be reached on 10 a.m - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272 1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/541,574  
Art Unit: 1796

Page 14

Gennadiy Mesh  
Examiner  
Art Unit 1796

/GM/

/VASUDEVAN S. JAGANNATHAN/

Supervisory Patent Examiner, Art Unit 1796